Product ID:505 CARTRIDGE, 2% METHANE

MSDS Date:08/01/1989

FSC:6665

NIIN:00-409-2251

MSDS Number: BPRGP === Responsible Party ===

Company Name: SPARKLET DEVICES INC

Address:4400 GUSTINE AVE

City:ST LOUIS

State:MO

ZIP:63116-1712

Country:US

Info Phone Num:314-353-0400 FAX: 314-353-0850

Emergency Phone Num:314-353-0400

Preparer's Name:PJ IGOE

CAGE:87286 === Con

tractor Identification ===

Company Name: SPARKLET DEVICES INC

Address:4400 GUSTINE AVE

Box:City:ST LOUIS

State:MO

ZIP:63116-1712

Country:US

Phone:314-353-0400

CAGE:87286

======= Composition/Information on Ingredients ========

Ingred Name: METHANE

CAS:74-82-8

RTECS #:PA1490000 Fraction by Wt: 2%

Other REC Limits: NONE RECOMMENDED

ACGIH TLV:ASPHYXIANT; 9293

Ingred Name:AIR, REFRIGERATED LIQUID; AIR COMPRESSED (UN1002, DOT); AIR REFRIGERATED LIQUID (CRYOGENIC LIQUID) (UN1003) (DOT)

RTECS #:AX5271000 Fraction by Wt: BALANCE Other REC Limits: NONE RECOMMENDED Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: ACUTE: INHALATION MAY CAUSE ASPHYXIATION. CONTACT WITH LIQUID MAY CAUSE FROSTBITE. CHRONIC: NONE KNOWN. Explanation of Carcinogenicity: NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN. Effects of Overexposure: SKIN: REDNESS, BLISTERS, WHITE TO GREY COLORED SKIN. INHALED: DIMINISHED MENTAL ALERTNESS, IMPAIRED MUSCULAR COORDINATION, RAPID FATIGUE, NAUSEA, VOMITING, PROSTRATION, UNCONSCIOUSNESS, CONVULSIONS, COMA, AND DEATH. Medical Cond Aggravated by Exposure: NONE KNOWN First Aid:INHALED: MOVE TO FRESH AIR. GIVE RESPIRATORY SUPPORT AS NEEDED. SKIN: FLUSH WITH WATER. IF REDNESS DEVELOPS, GET MEDICAL ATTENTION, WARM AREA UNTIL MEDICAL AID ARRIVES. Flash Point:-213F,-136C Lower Limits:5% **Upper Limits:15%** Extinguishing Media: WATER, CARBON DIOXIDE, DRY CHEMICAL Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS AND BUNKER GEAR. USE WATER TO COOL FIRE EXPOSED CONTAINER. SHUT OFF SOURCE OF GAS IF FEASIBLE. Unusual Fire/Explosion Hazard: EXTREMELY FLAMMABLE. VAPORS MAU TRAVEL A DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK CAUSING A FIRE OR EXPLOSION HAZARD. ========= Accidental Release Measures ================ Spill Release Procedures: ELIMINATE ALL SOURCES OF IGNITION. STOP LEAK IF FEASIBLE. VENTILATE AREA. IF CANNOT STOP LEAK, ALLOW TO DISSIPATE TO ATMOSPHERE. Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER. ============= Handling and Storage ==========================

Handling and Storage Precautions:ST

ORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM SOURCES OF IGNITION AND INCOMPATIBLES. STORE AWAY FROM DIRECT SUNLIGHT. Other Precautions: NEVER SMOKE IN A WORK AREA WHERE METHANE BEING USED. ELECTRICALLY BOND AND GROUND CONTAINERS WHEN IN USE. ===== Exposure Controls/Personal Protection ======== Respiratory Protection: NONE NORMALLY REQUIRED. Ventilation: USE ADEQUATE EXPLOSION-PROOF MECHANICAL VENTILATION. Protective Gloves: NONE NORMALLY REQUIRED. Eve Protection:SA FETY GLASSES. Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER. Work Hygienic Practices: WASH HANDS AFTER USE AND BEFORE EATING. DRINKING, OR SMOKING. Supplemental Safety and Health MSDS FROM MANUFACTURER WAS FOR PURE METHANE NOT 2% METHANE AS IN THIS PRODUCT. 2% METHANE IS NOT FLAMMABLE (LEL IS 5%) NOR UNDER NORMAL CONDITIONS OF USE BE AN ASPHYXIANT. ========= Physical/Chemical Properties =========== HCC:G2 Boiling Pt:B.P. Text:-259F,-162C Melt/Freeze Pt: M.P/F.P Text:-297F,-183C Vapor Density:0.5(AIR=1) Solubility in Water:SLIGHT Appearance and Odor: COLORLESS, ODORLESS GAS IN A CARTRIDGE ======== Stability and Reactivity Data =========== Stability Indicator/Materials to Avoid:YES BROMINE PENTAFLUORIDE, CHLORINE, CHLORINE DIOXIDE, NITROGEN TRIFLUORIDE, LIQUID OXYGEN, AND OXYGEN DIFLUORIDE. Stability Condition to Avoid: SOURCES OF IGNITION, SPARKS, OPEN FLAME. CONTACT WITH INCOMPATIBLE Hazardous Decomposition Products:CAR BON DIOXIDE AND CARBON MONOXIDE ======= Disposal Considerations ============

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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